Barrier's Commission Subcommittee on Title 5

Introduction

The subcommittee on Title 5 of the Special Commission on Barriers to Housing has met, shared experiences with both state and local regulations for the design and construction of on-site sewage disposal systems and reviewed a number of examples of such regulations. In summary, one could say all of these regulations in some way restrict land from being used for housing or, at least, add some cost to housing.

There are varying conditions across the state and local regulations that are based on science may produce better functioning systems, promote sanitation and protect important ecologic resources. Communities are facing severe limits on their ability to provide adequate water to drink and an environmentally sound method of disposing of their wastewater. Properly operating on-site systems provide an effective way to dispose of wastewater and recharging groundwater.

Local boards of health presently have the authority to enact more stringent regulations than the present Massachusetts Sanitary Code found at 314 C.M.R.15.00. Local boards must enact these regulations under their general rule making authority pursuant to M.G.L. c.111, Section 31. They are required to file the regulations with the Department of Environmental Protection (DEP) for a central register. Not all boards of health comply with this requirement. While we are not aware of any legal challenges, presently the failure to file regulations with DEP is not fatal to the legal validity of the municipal regulations. Under Tortorella v. Board of Health of Bourne, 39 Massachusetts Appeals Court 277, (1995) the Massachusetts Supreme Court upheld the rights of the Board of Health to enact more stringent regulations.

The subcommittee identified several reasons why municipalities adopt standards stricter than Title 5. First, local environmental conditions may warrant it. Second, there continues to be debate about the science behind some parts of Title 5, such as setbacks, and municipalities may feel justified in going beyond the standards based on their own interpretation of the science. Third, communities may perceive that zoning regulations and other planning tools do not provide adequate means to properly manage growth. They may use local Title 5 regulations to fill this gap. The implication here is that the local regulations are not always based on science. Fourth, local boards may lack the resources or training to fully implement Title 5, so they misapply the regulations or prohibit some things allowed by the state. Finally, there are gaps in policy and implementation at the state level that may have led communities to adopt their own regulations.

This report makes recommendations addressing all but the first and second identified reasons. Where local environmental conditions legitimately require standards stricter than Title 5, there is a presumption that those environmental protections will be honored. Regarding the second issue, technical literature contains the results of studies that have

found varying rates of survival for pathogens traveling through saturated and unsaturated soils and also variations in soluble nutrient concentrations measured in the groundwater down gradient from on-site disposal systems. There is no consensus about safe or adequate setbacks from water supplies or environmentally sensitive lands and waters. The subcommittee chose not to debate science-based regulations regarding setbacks from resources but instead to evaluate requirements that had little apparent scientific foundation. However, it should be noted, that while supposedly science-based, there are numerous examples of regulations that appear to adopt the philosophy that doubling, tripling or even quadrupling Title 5 will provide a margin of safety. This multiplier concept may result in overly conservative regulations that could restrict land for housing.

1. Burdensome Local Limitations

1.1 Local Limitations

The subcommittee, relying extensively on their collective experiences, considered numerous local regulations adopted under M.G.L. c.111 sec. 31 and found common categories of conditions that constitute barriers to housing without a readily apparent public health or environmental benefit. Some subcommittee members felt that the local limitations are driven by a local initiative to limit or control growth and a desire for the board of health, through its regulatory powers, to overcome perceived weaknesses in local land use regulations. M.G.L. c.111, Section 31 requires boards of health to report the conditions that trigger stricter local requirements at a public hearing. While boards are required to file their local regulations with DEP, they are not required to state how science supports the limitations nor are they required to file that information with DEP. The Department has on file local regulations from 125 communities. The subcommittee did not try to resolve why the limitations were put in place. The restrictions that are summarized below exceed the Title 5 requirements, add costs, restrict land and can be barriers to housing without having, in the opinion of the majority of the subcommittee members, a demonstrable public health or environmental protection benefit.

(a) **Process Limitations** - Towns have enacted regulations limiting the time of year soil evaluations and percolation tests may be observed. Given that soil evaluators must be certified by the state and are taught to recognize soil features that are indicative of seasonal high groundwater, many of these time restrictions are unnecessary and delay without environmental or public health benefit. Other process limitations include seasonal limitations on construction of on-site systems, requiring system designs based upon "policies", not publicly available regulations or good engineering practices and lack of agent availability to witness soil testing or schedule design reviews.

(b) **Oversizing Requirements** - This is a very common feature of local regulations that clearly adds to the cost of housing and may, in fact, reduce treatment efficiency. Oversizing requirements include increased flow allowances – calculate per Title 5 then add 50% or double; over-counting

bedrooms – all rooms above the first floor shall be considered bedrooms; and directly boosting the long term acceptance rate of soil from that required in Title 5.

(c) **Reserve Area Requirements** - Communities have enacted regulations that require expanding setbacks between primary and reserve areas, especially for trench systems. Some communities require the reserve area be cleared and graded when the primary area is built and, at least in one case, to require the reserve area to be actually constructed with the primary area but not connected or used until a future failure, if ever, occurs. These requirements add substantial cost compared to Title 5 and appear to have limited environmental benefit.

(d) **Percolation Rate Limits** - While Title 5 allows building on lots with a sufficient area of soils having field-tested percolation rates of 30 minutes per inch or less, some communities have limited maximum rates to 20 minutes per inch thereby reducing land that would be otherwise buildable. Other communities have placed limits on sites where the percolation rates are too rapid and disallowed sites with rates less than 2 minutes per inch instead of requiring the design measures provided in Title 5. There is limited scientific reason for restricting percolation rates from those listed in Title 5 as long as proper design measures are followed.

(e) **Limiting or Prohibiting Mounded Systems** - A number of communities limit or prohibit the construction of disposal systems in fill to obtain the required separation between the bottom of the disposal system and the maximum groundwater level. These frequently include excessive off-grading requirements or setbacks from property lines, which can add significant costs. Many effectively prohibit mounded systems by requiring four feet of "naturally occurring" suitable material to be above the maximum groundwater elevation; several require 6 feet of separation. Some require 6 feet of naturally occurring soils, which would eliminate much of a mound. These effectively eliminate building lots with seasonal high water tables, conditions for which there are well-established engineering and construction solutions.

(f) **Limiting Innovative or Alternative Technologies for Systems** - Some communities have local restrictions on the use of innovative or alternative Title 5 systems. These systems, which provide a higher level of treatment, can be effectively used to address difficult remedial cases, especially near sensitive lands. This will allow additional existing housing stock into the marketplace.

(g) **Prohibiting Shared or Community Systems** - Title 5 allows individual homes to share a common disposal system within certain limits on flow and level of treatment. Many local regulations do not. This local prohibition limits remedial options where neighborhood problems exist. While there may be public hesitation to accept these community systems and legal arrangements are needed, there is no scientific or engineering reason why they cannot provide well-functioning systems that achieve a high level of environmental protection.

Recommendation

It should be noted that the subcommittee felt that there are in some circumstances science based reasons for having stricter local limitations and therefore rejected the idea of prohibiting communities from adopting their own standards. In response to concerns that some of the above restrictions might be anecdotal, DEP reviewed randomly selected local regulations from 12 communities to determine if any contained the above type restrictions. The results of that review are summarized in the attached table.

It is recommended that M.G.L. c. 111, section 31 be amended. Under the amendment the local board of health would be required to identify the local conditions which exist or reasons for exceeding such minimum requirements must specify the scientific, technological or administrative need to support the change in the regulations. Second, the board of health would have to file the regulation and supporting information with the DEP within thirty (30) days in order for the regulation to become effective. The statute should take effect one year after the date of enactment. There needs to be additional discussions and debate with the stakeholders and as part of the legislative process on whether or not to make this requirement retroactive.

During the one year between enactment and the effective date of the amendment, DEP should issue guidance to boards of health indicating that in its opinion the above types of regulations do not, on their face, appear to be based on science. Boards would be advised to examine their regulations and if they contain these types of condition they should obtain the necessary scientific documentation, if they haven't already done so, or eliminate them. DEP should collaborate with the Massachusetts Association of Health Boards (MAHB) and the Massachusetts Health Officers Association on providing guidance and training to local boards of health to assist them in improving their local regulations and practices and complying with the new requirements.

Lead: DEP
Cost: Two ftes and small contracts with MAHB and MHOA to provide guidance and training.

Results of Random review of Board of Health Regulations More Stringent than Title 5

TOWN	Process Limitations	Oversizing Requirements	Overbuilding Requirements	Percolation Rate Limits	Limit or Prohibit Mounded Systems	Limit I/A Technologies	Prohibit Shared or Community Systems
Billerica	X	X				X	
Bolton	X	X	X		X		
Boxborough	X		X	X	X		X
Deerfield		X	X				
Dennis	X	X	X		X		X
Dover	X	X	X	X	X		
Leverett			X	X	X		
Marion		X					
Norwell	X		X		X		
Rowley	X	X	X	X	X		
Stow	X	X			X		
Wendell	X		X				
Total	**9**	**8**	**9**	**4**	**8**	**1**	**2**

The total number of towns in the Commonwealth with known local board of health regulations or by-laws supplementing Title 5 is 125. The above data represents the review of approximately 10% of the towns with such regulations or by-laws for the seven criteria listed in Section 1.1.

1.2 Prohibitions on Alternative Systems and Shared Systems

Some communities have passed regulations barring the use of alternative technologies under Title 5 and/or use of Shared Systems. State government should renew its focus on these approaches because they have the potential to ensure high quality wastewater treatment and to encourage clustered residential development, groundwater recharge, and land conservation. Additionally, these systems can alleviate the incidences of perceived Title 5 problems (from the municipality's perspective), such as mounding or the need for larger than standard reserve areas and leach fields. They also offer the developer a less

expensive option to installing many individual systems, thereby clearing the way for more affordable housing developments. In spite of these benefits, there are some barriers to using Shared Systems, namely land use approval, liability, and long-term maintenance of systems. DHCD and DEP have worked together in the past to identify these issues, therefore, the next step is to identify feasible solutions.

Recommendation

DEP and DCHD should build on past collaborative efforts to identify other ways in which the two agencies can collaborate on the implementation of alternative technologies and shared systems. These efforts should include, at a minimum, an evaluation on how these systems are performing and whether there are ways to simply the procedures.

Lead: DEP
Cost: Minimal

2.Improved Science and Education

2.1 Technical Education

The subcommittee is aware that one important way to achieve more efficient board of health operations would be the increased access to science and training from DEP to the local boards of health. Advocates have worked hard to provide training for their members and the subcommittee would like to support these efforts. Board of health members with access to science and training are more likely to identify the public health issues and make informed decisions.

Much of the science used in developing the 1995 revisions to Title 5 was based on the Defeo-Wait Report. That report is now over 10 years old and while it was very comprehensive, there have been advancements in science as well as significant experience gained by DEP as a result of implementing Title 5. Improved science and technical information in the form of a guidance document would be useful to all parties in the Title 5 review process, namely; DEP, local boards of health, environmentalists, and the development community,

Recommendation

The Commission should consider funding an update to the DeFeo-Wait Report and collection of literature from the other states and relevant sources. An advisory group should be created by DEP to assist in compiling existing science and as a forum for technical discussions on updated scientific discussions.

Lead: DEP
Cost: Consulting contract less than $100,000

Recommendation

A guidance document similar to the DEP Stormwater Guidance document should be published that addresses the technical questions associated with Title 5 and provides the science and literature that address these issues. The Advisory Committee would oversee the update and assist in the presentation of the science and literature.

Lead: DEP
Cost: Consulting contract less than $100,000

Recommendation

A process for education of local boards of health should be developed to accompany publication of a guidance document, as well as any amendment to the board of health enabling statute.

Lead: DEP
Cost: Contract for training for approximately $100,000

2.2 Access to Resources

Boards of health across the state have varying levels of capability to implement Title 5. This capacity is primarily limited by the individual and collective knowledge and experience of the local board. Additionally, capacity is limited by access to resources, including training, funding, and personnel; perceptions on the part of board members regarding priorities and realities; circumstances within their jurisdictions, including landscape, natural resources, type of development occurring, etc.; time available to handle the job duties; and extent of their responsibilities. The characteristics of a community also factor in: natural resources, political circumstances, socio-economic situation, development priorities, demographics, etc. Boards of Health are especially vulnerable to a lack of capacity because their mission is very broad -- it covers public health and environmental management -- *and* they have regulatory authority.

Training itself can address some of the artificially strict Title 5 regulations. For instance, it is one solution to the problem of boards of health prohibiting alternative systems if they don't understand them and feel unprepared to regulate them. Training can also clarify what special resource issues might exist in a community that would warrant stricter regulations.

Recommendation

The Commission should consider the use of circuit riders for assisting local boards of health and their agents in implementing Title 5.

Lead: DEP

Cost: Five ftes per year for four circuit riders and one coordinator.

2.3 Cross-Board Training

While this subcommittee is primarily concerned with boards of health because they are the ones responsible for implementing Title 5, we are also working in the context of Title 5 as a barrier to development. The boards that are normally responsible for managing development are planning boards, zoning boards, and boards of selectmen. These are the boards that are trained in community development, while boards of health are trained in public health and environmental regulations. When Title 5 is used as a means to control development, it puts boards of health in the position of policing growth without having the benefit of training or experience in this area.

Recommendation

The Commission should consider providing funding to develop programs for cross-board training on general Title 5 for conservation commissions, planning and zoning boards, and boards of selectmen.

Lead: DEP
Cost: Consulting contract less than $100,000

Recommendation

The Commission should consider expanding existing efforts, such as the Local Capacity Building Partnership and ongoing work of DEP and DHCD to provide assistance to local boards.

Lead: DHCD

2.4 Integrated Wastewater Management

Wastewater management problems confronting communities today are comprised of complex and interrelated issues. Most remaining problems defy single solutions. Instead they require at least the consideration, and most likely the selection, of integrated solutions. DEP expects that proposals to manage complex wastewater management and water resources problems will incorporate a combination of traditional on-site disposal, moderately sized cluster systems and central collection and treatment technologies. The use of such an approach offers communities the chance to lower costs, keep water local and avoid some of the pitfalls that arise when attempting to site a single large discharge for all effluent. Title 5 plays an integral role in the state's effort to properly manage its water resources.

Recommendation

The Comprehensive Water Resources Management Guidance currently being developed by DEP for use by communities should include guidance on the role of typical on-site systems, shared and alternative systems and septage management districts as part of integrated solutions to wastewater management. The guidance should include examples of successes that have occurred and samples of acceptable legal instruments that are often required.

Lead: DEP
Cost: Minimal

3. Title 5 Regulations and Policies

While the subcommittee on barriers focused on issues related to local Title 5 regulations, on several occasions, topics within Title 5 itself came up in the subcommittee's discussions. The subcommittee feels that it should include the results of those discussions it its report.

3.1 B Horizon

Based on the definition of impervious material, the DEP has interpreted Title 5 as excluding the B horizon, or subsoil, from use in soil absorption systems. This interpretation was based in part due to the fact that subsoil layers in Massachusetts vary considerably in thickness, texture and organic content. The B horizon, however, can be sufficiently permeable to be used in soil absorption systems. In addition, use of sufficiently permeable B horizon can provide some biological treatment of the septic tank effluent. DEP has recognized this and adopted a policy allowing for use of the B horizon for remedial use only. The science involved in developing the policy is also applicable to the installation of new systems.

Recommendation

DEP should develop a policy to allow for the use of B horizons, that are sufficiently permeable, in new soil absorption systems.

Lead: DEP
Cost: Minimal

3.2 Nitrogen Sensitive Areas

Title 5 contains a provision requiring additional treatment in nitrogen sensitive areas. It designates nitrogen sensitive areas as Interim Wellhead Protection Areas and mapped Zone IIs of public water supplies. The regulations also allow additional areas to be designated nitrogen sensitive as a result of scientific evaluation and incorporation within Title 5 and the Massachusetts Water Quality Standards. The regulations do not specify the nature of the scientific evaluation. However, some communities have required,

through local regulations, additional treatment in areas they feel are nitrogen sensitive by creating their own procedures for designating nitrogen sensitive areas without guidance from Title 5.

Recommendation

DEP should develop a guidance document on the nature and extent of the scientific evaluations necessary to designate an area to be nitrogen sensitive as well as the procedures necessary to adopt such a designation.

Lead: DEP
Cost: **Consulting contract less than $100,000**

3.3 Percolation Rate

3.3.1 Change in Maximum Percolation Rate

Prior to the revisions of Title 5 in 1995, a lot was considered not buildable if the percolation rate of the soils available were slower than 30 minutes per inch as determined by a percolation test. The revisions to Title 5 in 1995 contained provisions for DEP to obtain information on the advisability of allowing the construction of onsite septic systems in situations where the percolation rate is slower than 30 minutes per inch.

Massachusetts is one of only two states that set a percolation rate limit of 30 minutes per inch. Most use 60 minutes per inch for the slowest acceptable field-tested rate. At the time of the last revisions to Title 5, the issue of raising the maximum percolation rate to 60 minutes per inch was left for further review by DEP after their analysis of 3 years experience with the then new regulations. Increasing the maximum allowable percolation rate to 60 minutes per inch would make available significant land areas of glacial till soils that have percolation rates over 30 minutes per inch.

DEP established a procedure for applicants to apply under a program that would permit up to "20 single family dwellings per year…" in situations where the percolation rate was slower than 30 minutes per inch. This procedure involves:

- Completing and submitting an application;
- Submitting plans and soil evaluations in accordance with Title 5;
- Obtaining and submitting a letter of support from the local approving authority;
- Submitting a monitoring plan that includes at least one annual inspection for seven years;
- Submitting an application fee of $450.

To date, with the potential for more than 120 applicants (20 per year x 6 years), DEP has received a total of less than 15 applications under this procedure. Some members of the subcommittee felt that the application procedures deter developers from exercising this option.

Although some individuals on the subcommittee favored changing Title 5 to accommodate the slower percolation rates, the regulator participants considered this ill advised. The provisions of Title 5 were meant to provide information to DEP on the advisability of such a change; however, the lack of applicants has not afforded the opportunity for clear information. Subcommittee members pointed out that there have been slow percolation rate systems installed for some time now for remedial purposes and that a review of these systems could provide valuable information.

A primary concern of DEP has been that installation of on-site systems in high percolation rate soils requires specialized considerations in the design and construction of the systems as well as with the inspections of the installations and while there is experience in some parts of the state with the installation of systems in high percolation rate soils for remedial purposes, there is a lack of widespread experience among the practitioners within the state. Therefore it was felt that at least for the first several years there was a need for DEP oversight as training and experience developed for practioners.

The compromise position is to allow at least 20 but not more than 50 applicants per year to apply under this program, and provide better outreach and assistance to potential applicants. While the actual number of applications allowed will be set through the regulatory revision process, 50 was selected as the upper limit as it would only require minimal additional resources for DEP.

The reasons for the lack of applicants to the existing program are not clear. Some subcommittee members felt that the application was too similar to a Pilot Application, and hence required too much monitoring and was associated with the increased risks of that program and made lending institutions wary. An application packet could be developed that explained the program more completely, the application procedures could be streamlined and the regulations could be amended to remove some of the liabilities involved so that potential lending institutions would not assign the project a higher risk.

Recommendation

DEP should streamline the application procedure for applicants wishing construct septic systems where the percolation rate is between 31-60 minutes per inch, provide a better information packet and outreach component to explain the application procedure to developers and lending institutions, reduce the perceived risks involved, revisit the monitoring requirements and allow at least 20 but not more then 50 applications per year for two to three years. At the end of two to three years DEP should present the results of the monitoring information it has gathered to a group of stakeholders and determine if the implementation of slower percolation rates under the general provisions of Title 5 should be allowed.

Lead: DEP
Cost: Two additional ftes to review additional applications and review monitoring results.

Recommendation

DEP, in cooperation with the MAHB and MHOA, should gather and review information from local boards on their experience with low percolation rate systems installed for remedial purposes. DEP should incorporate the results of this effort into its presentation on the above monitoring program.

Lead: DEP
Cost: Minimal contracts with MHAB and MHOA.

3.3.2 Monitoring and Inspection Form

One deterrent of any permit program is the cost of the required monitoring, inspection and reporting. The intent of monitoring program being required by DEP is to ensure systems installed DEP in the slower percolating soil areas functioned hydraulically (since the treatment ability of slower soils is in general superior to faster percolating soils). DEP should include in the previously mentioned application packet a one-page inspection form that will meet the reporting requirements of the slower percolation rate areas.

Recommendation

Produce guidance for the monitoring program required in slower percolating soils and prepare a new inspection form.

Lead: DEP
Cost: Consulting contract less than $100,000

3.3.3 Training for Professionals

The initial reluctance of DEP to allow septic systems in slower percolating soils was due in part to the lack of proper system installation training received by members of the design and contract communities. While DEP has embraced the soils-based approach to septic system design, it realizes design and construction in tighter slower-percolating soils requires a higher level of oversight in all phases of the septic system installation. Training appropriate professionals can ensure proper design and construction.

Recommendation

DEP should implement a training program for the certification of Soil Evaluators, system designers and contractors for the design and installation of septic systems in slower soils, in anticipation of a revision to Title 5 that will accommodate up to 60 minutes per inch percolation rates.

Lead: DEP
Cost: Two ftes for two years and one fte per year thereafter.

3.3.4 Waiver of Fee

In the period between now and the possible implementation of slower percolation rates, under the general provisions of Title 5, all applications with this feature should continue to be reviewed and approved by DEP. The $450 application fee was meant to compensate, in part, for the time required by personnel to review individual projects. If, as some contend, the application fee deters potential applicants of affordable housing, the application fee could be either eliminated or waived on the basis of each applicant's financial status or some other objective criteria.

Recommendation

Remove the $450 Application fee for this permit or waive the fee based on some affordability criteria.

Lead: DEP
Cost: Up to $67,500 in lost revenue over three years.

3.3.5 Local Approval

Some on the subcommittee felt that local jurisdictions were using regulatory controls outlined in Title 5 inappropriately as a growth control. This requirement of the Variance from Percolation Rate provisions is an obvious opportunity for local Boards of Health to exert control. Although the septic system plan will receive full review by DEP, the Committee did not reach a consensus on whether or not to delete the requirement for local approval.

4. Minority Reports

The subcommittee received one minority report and several sets of comments from members, copies of which are attached to this report. The subcommittee met to discuss the issues raised in these attachments and the appropriate response. While all comments were considered, the subcommittee agreed that, in general, the comments focussed upon four major issues which needed to be addressed and explained to the Commission.

4.1 Local Title 5 regulations are used for land control.

While many members of the subcommittee felt the Title 5 regulations were used for land control and one health board member admitted that it had happened in his community, the subcommittee did not have evidence that this generally the case. The report has been edited appropriately.

4.2 The MA Association of Health Boards (MAHB) and MA Health Officers Association (MHOA) were not represented on the subcommittee.

While the subcommittee included representatives of health boards and health agents, MAHB and MHOA were not contacted and asked to appoint a representative. Both associations have since been contacted, provided an opportunity to comment and participate in future meetings. DEP is meeting with the leadership of both associations to discuss the subcommittee report and their concerns.

4.2 Local limitations are isolated occurrences.

The claim was made that the local limitations discussed in Section 1 of this report were isolated occurrences. DEP reviewed 12 local regulations, 10 percent of those on file, randomly selected from around the state, to determine which, if any, contained the types of local limitations cited. The results of that review demonstrate that the limitations are not isolated occurrences. The results have been summarized in a table and incorporated into this report.

4.4 Disagreement with the recommendation on increasing the maximum percolation rate.

Concerns were raised on the basis for increasing from twenty to fifty the number of slow percolation rate systems allowed per year and whether sufficient data could be obtained over the three-year interim period. The text has been modified to reflect that fifty slow rate systems per year is the maximum number of systems that could be reviewed by DEP with minimal additional resources. It has also been clarified to reflect that any increase in the current allowance for twenty slow rate systems would need to be part of a regulation revision process. Further a recommendation has been added to have DEP in cooperation with MHAB and MHOA canvas local boards of health on their experience with slow rate percolation systems installed for remedial purposes, a long standing practice.

5. Conclusion

There is a belief, among some, that the requirements of Title 5 alone are adequate to provide for the public health, safety and welfare in all on-site wastewater disposal situations. The Barriers to Housing Report raised the issue of whether local boards of health regulations are unnecessary and often unduly burdensome on applicants who wish to exercise reasonable use of their real property and therefore all local regulations should be repealed or made void.

It was found that many local regulations proceed with sound basis and are in agreement with the provisions of Title 5, specifically 310 CMR 15.003(1) & (3) which states: "In general, full compliance with the provisions of 310 CMR 15.000 is presumed by the Department to be protective of the public health, safety, welfare and the environment. **Specific site or design conditions, however, may require that additional criteria be met in order to achieve the purpose and/or intent of 310 CMR 15.000."** (Emphasis added) and "Local approving authorities may enact more stringent regulations to protect public health, safety, welfare and the environment only in accordance with M.G.L. c. 111 sec.31 and M.G.L. c. 21A sec. 13."

It is conceded that some local regulations fail to clearly demonstrate a public health benefit and may have been a central motive for enactment in issues other than the protection of the public health and the environment. On the other hand, a wide body of literature and published studies support many local regulations. To indiscriminately eliminate all local board of health regulation related to Title 5 could significantly reduce the public health protection afforded by valid regulations and undermine the boards of health ability to administer this vitally important environmental care. Great care and innovative approaches should be considered to excise superfluous local regulations while maintaining those regulations that are based on legitimate public health and/or environmental concerns.

6. Acknowledgments

The Department wishes to thank the following individuals for participating on the subcommittee and offering their time and knowledge.

Isabel Barbara-Castro, Neighborhood Assistance Corporation of America; Tom Cambareri, Cape Cod Commission; Jennifer Dalrymple, Duxbury Board of Health; Robert Daylor, Daylor Consulting Group, Inc.; Pam DiBona, Environmental League of Massachusetts; Paul Douglas, Franklin County Housing & Redevelopment Authority; Ed Eichner, Cape Cod Commission; Len Gengel, C&S Builders, Inc.; George Heufelder, Barnstable County Health Department; Peter Kolodziei, Tr-Town Health District; Elisabeth Miley, MA Department of Housing and Community Development; Lee Muniz, Representative Anthony Verga's Office; Richard Nylen, Lynch, Desimone & Nylen; Kevin Rabbitt, K. B. Rabbitt and Associates; Stephen Ryan, MA Association of Realtors; Mark Siegenthaler, MA Department of Housing and Community Development; Kevin Sweeney, Sweeney and Sons, Inc.; Lou Wagner, MA Audubon Society; Robert Zimmerman, Charles River Watershed Association.

Respectfully submitted
Lauren A. Liss, Commissioner
Department of Environmental Protection

Minority Report on
Barriers To Housing Commission: Report of Title 5 Subcommittee
August 21, 2001

The report presented to the Barriers to Housing Commission from the Title 5 Subcommittee does not represent the position of all Subcommittee members. In fact, the undersigned committee members and organizations are concerned that many of the recommendations are based on anecdotal information and seek to undermine home rule and environmental protections. We hold that neither should be sacrificed to provide housing for citizens of the Commonwealth.

While we reserve the right to comment in more detail on the specifics of the report, we are most concerned about the following issues with regard to its development and content:

Subcommittee membership did not include Boards of Health.
Neither the Massachusetts Association of Health Boards or the Massachusetts Health Officers Association was included in the discussion. Both of these organizations represent the group responsible for implementing Title 5, developing local bylaws, and enforcing those rules.

Individual cases are presented as wide-spread problems.
While the Subcommittee was provided with selected local bylaws for review, no one compiled their characteristics for comparison by the group, nor were tallies developed to determine the incidence of "unfounded" restrictions. We object to the anecdotal nature of the review presented in the body of the report. As the conclusion states, "many local regulations proceed with sound basis and are in agreement with the provisions of Title 5...". The Commission should not be misled into thinking that most Boards of Health are overstepping their authority in implementing the law.

The existing pilot program to evaluate a slower percolation rate is adequate (Section 3.3).
We object to the recommendations to allow 50 applicants per year for slower-than-30-minute percolation rates and eliminate the fee. If over the course of six years DEP received only 15 applications, why must the limit be raised to 50 in one year? We do not see the application procedure as particularly onerous, and oppose reducing the list of requirements. The logical reason for lack of applications is the increased cost associated with yearly monitoring, and the delay caused by review of the application and proposed plans. Since the program is testing a slower percolation rate, caution is justified, and these procedures are necessary. If developers are truly dedicated to both maximizing homebuilding as well as protecting natural resources as they often point out, they will participate in the program to build the body of evidence supporting such a change.

We urge the Commission to send the Subcommittee back to its task with <u>all</u> stakeholders at the table, and adequate time and information to draw fact-based conclusions and recommendations.

Submitted by:

Pamela DiBona, Title 5 Subcommittee member
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Marcia Benes
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CRWA

Charles River Watershed Association

July 25, 2001

Glenn Haas, Acting Assistant Commissioner
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Re: Comments of the Charles River Watershed Association on the Barriers Commission Subcommittee Title 5 Draft Report

Dear Mr. Haas:

CRWA is appalled at the assumptions surrounding the formation of a "Barriers Commission Title 5 Subcommittee," the need for the subcommittee, its composition, the lack of process that led to its findings, and the findings themselves. All are the result of a desire among developers and real estate brokers to remove what they perceive to be obstacles to their commerce, and might best be characterized as sprawl-enabling. The assumptions surrounding virtually the entire report are heavily anecdotal, and the report itself the work of unknown authors. The subcommittee does not include representation from either the Massachusetts Association of Health or the Massachusetts Health Officers Association Boards. These groups represent the local Boards of Health, those responsible for dealing with septic systems and their regulations on a day-to-day basis.

Further, the notion of "Limited-Science Burdensome Regulations" as described is simply without merit. There is no discussion of the pros and cons of the regulations in terms of the objectives they seek to address. For example, limits to mounded systems may have much to do with stormwater runoff and its impacts, certainly real, science-based issues. Since permits for wastewater disposal go to the property, and not to successive owners, issues of sizing and flow have merit based on potential future uses of such property. That there are additional environmental issues of clear-cutting and bio-mat problems with oversized systems suggests that there are issues in the methods for calculating flows worthy of careful analysis, as opposed to anecdotal declarations.

Limits to innovative and alternative technologies, and prohibitions to shared or community systems may have much to do with the infrastructure within a community to oversee and maintain such facilities. Should such facilities fail, there is ample science to suggest that they could pose real hazards to public health, long after developers and real estate brokers have reaped their benefits and left such properties to municipal oversight.

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Website: www.crwa.org Email: crwa@crwa.org.

Such a one-sided, ill-advised and poorly written report serves no one, particularly the health and well-being of the citizens of the Commonwealth. It should be summarily dismissed. Should the administration feel the need to evaluate Title 5 and Massachusetts Boards of Health powers to further restrict on-site wastewater disposal, the administration should appoint a new commission with equal representation from the development, real estate, environmental, health, regulatory and public policy communities, scope a real review, and allow ample time for a thorough evaluation of chapter and verse with both majority and minority reports.

Thank you for the opportunity to comment on this document. Please do not hesitate to contact me if you have any questions.

Sincerely,

Robert L. Zimmerman, Jr.
Executive Director

Environmental
League of
Massachusetts
Advocates For Responsible Environmental Policy Since 1898

July 19, 2001

Glenn Haas, Acting Assistant Commissioner
Bureau of Resource Protection
Department of Environmental Protection
One Winter Street
Boston MA 02108

Dear Glenn,

Thank you for coordinating the Subcommittee on Title 5 to the Governor's Commission on Barriers to Housing. The Environmental League has several comments on the report which we hope will be incorporated before it is submitted to the Commissioner.

Introduction
I have attached suggested reorganization and edits to the introduction.

Limited-Science Burdensome Regulations
We object to the heading of this section, which passes judgement on bylaws that may have some justification, but for which DEP has never required or sought out explanation.

Under the first recommendation, all three options require the local Board to "state the public health problem/threat and state the science/literature to demonstrate that the regulatory change will protect public health." What is the standard of care here? The report introduction states that reasonable people can argue as to the implications of a specific study, or the regulations that should result from a body of literature. Boards of Health do not have the resources to conduct site-specific investigations, nor will developers want to carry out scientific investigations to examine conditions at each lot. DEP must be willing and able to assist Boards of Health in implementing the regulations in a manner that ensures resource protection. If stricter site-specific standards are in fact justified, the Board should not be restricted from putting them in place for lack of staff to research and prepare extensive justifications. Further, DEP should establish an electronic "library" for Boards of Health to make literature easily available.

Improved Science and Education
This section refers to the DeFeo, Wait & Associates report as "very comprehensive." Others have argued that the report "was not a comprehensive review of the information regarding pathogen transport in groundwater. Further, the DeFeo, Wait & Associates' Report omitted a broad field of literature and research, some of which supports the need for increased setbacks in certain soils, particularly with reference to viruses" (Heufelder, May 2001 memo). If the report is to be updated, these deficiencies

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must be addressed. DEP should also make provisions for revisiting the document every two years if Boards of Health are to rely on it for documentation.

We agree that the Stormwater Guidance Document has been a useful tool for Conservation Commissions and developers alike. Any guidance document for Title 5 implementation should make it clear, however, that more stringent local bylaws are allowed.

The reference to changes to the Board of Health enabling statute in the third recommendation cannot stand as is. I do not recall discussion of changes, beyond an effort to allow private contracts for wastewater systems management. Please amend this section to reflect that discussion, and avoid alarming Boards of Health.

Title 5 Regulations and Policies

We do not agree with the proposal to allow 50 applicants per year for slower-than-30-minute percolation rates. If the agency is concerned about lack of data to evaluate the merits of slower percolation rates, why increase the number allowed? If over the course of six years DEP received only 15 applications, why must the limit be raised to 50 in one year? We do not see the application procedure as particularly onerous, and oppose reducing the list of requirements. The logical reason for lack of applications is the increased cost associated with yearly monitoring, and the delay caused by review of the application and proposed plans. Since the program is testing a slower percolation rate, caution is justified. If developers are truly dedicated to both maximizing homebuilding as well as protecting natural resources as they often point out, they will participate in the program to build the body of evidence supporting such a change.

The report correctly states that a higher level of oversight will be required for systems in slower-percolating soils. This point must be a central one in any proposed change to the Title 5 regulations.

I am also enclosing comments from the Massachusetts Association of Health Boards, a member of the Massachusetts Environmental Collaborative. Unfortunately, they learned of the Subcommittee's meetings and report from ELM rather than through DEP. We urge you to consider their concerns as you revise the report for submission to the Governor.

Please be sure to forward the next version of the report and any supporting materials when they become available.

Sincerely,

Pamela DiBona
Legislative Director

cc: Marcia Benes, Mass. Association of Health Boards

MEMORANDUM

To: Governor's Special Commission on Barriers to Housing Production

From: Home Builders Association of Massachusetts

Date: October 23, 2001

Re: Recommendations relative to Title 5

On January 25, then-Governor Argeo Paul Cellucci announced the formation of the Governor's Special Commission on Barriers to Housing Development. "The citizens of Massachusetts need affordable places to live," said Cellucci at the time. "If there are government regulations that can be improved or streamlined to make building and preserving housing in the commonwealth easier, then we should try to remove those barriers."

The Executive Order establishing the commission charged it with making "recommendations to the Governor as to specific legislative, regulatory, policy and operational changes that are required to remove, or to otherwise ease, such barriers to residential development so as to create housing that is affordable across a wide range of incomes and available throughout a broad spectrum of the Commonwealth's neighborhoods."

Finally, the commission was specifically required to "identify whether local municipalities have regulation or by-laws relating to Title 5...that vary from the state's requirements, and if so, whether such variations are justified by sound scientific principles and make such recommendations, if found necessary, to ensure that Title 5 is addressed and enforced on the local level in accord with sound scientific principles so that housing development is not unnecessarily impeded." (emphasis added)

In the report of the Subcommittee on Title 5, it is stated that there are several reasons why municipalities adopt standards stricter than Title 5, they are:

- Local environmental conditions may warrant it
- Continued debate about the science behind some parts of Title 5
- Perception that zoning regulations and other planning tools do not provide adequate means to manage growth
- Misapplication of the Title 5 or prohibition of things allowed by the state due to lack of local resources or training
- Gaps in policy and implementation at the state level leading communities to adopt their own regulations. (emphasis added)

The report notes that the Department of Environmental Protection has on file local regulations that exceed the requirements of Title 5 from 125 communities. It then sets out the types of local regulations adopted by some cities and towns that in the opinion of a majority of its members "add costs, restrict land and can be barriers to housing without having…a demonstrable public health or environmental protection benefit."

Disappointingly, then, the subcommittee offers a tepid response to its own findings, suggesting that G.L. c. 111, §31 be amended to merely require local boards of health identify to the Department of Environmental Protection the local conditions which exist or scientific, technological or administrative need for exceeding the provisions of Title 5, for such local regulations to be effective.

The Home Builders Association of Massachusetts recommends that G.L. c. 111, §31 be amended to establish Title 5 of the State Environmental Code (314 C.M.R. 15.00) as a statewide uniform code for the installation of on-site sewage disposal systems, provided however, that municipalities be permitted to adopt their own regulations

exceeding the provisions of Title 5 upon the submission of a written application to the Department of Environmental Protection for approval to do so.

Approval of said local septic regulations should be subject to a two-prong test.

First, did the community document, scientifically, the existence of some unusual or unique resource within their community that warrants the need for greater treatment than afforded by Title 5? This documentation could be based on scientific data or evidence demonstrating that application of the Title 5 standards is not sufficient to protect that particular resource.

Secondly, did the scientific data demonstrate that the superseding requirement will provide the needed increased environmental protection without being excessive? This is needed to prevent the application of arbitrary standards that go far beyond what may be needed to provide adequate protection.

The HBAM disagrees with those on the subcommittee when they said that it was not possible to have standard regulations that could be applied across the state because of variable conditions. To the contrary, Title 5 takes into account all kinds of variable conditions. For example, there are special provisions for designing systems within soils with rapid permeability rates, there are requirements for extended set backs to public water supply areas, there a special regulations regarding nitrogen sensitive areas, there are special provisions for conducting percolation testing in soils with slower rates, etc.

Rather, the Home Builders Association of Massachusetts agrees with DEP Commissioner Lauren Liss when she said, "[t]here was a tremendous amount of scientific research that went into the standards when the state's code was updated in 1995, and we think those rules go far enough." ("Title 5 brings unintended results," *The Boston Globe*, Saturday, October 28, 2000)

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Governor Jane Swift
Rm 360
State House
Boston, MA 02133
August 10, 2001

Dear Governor Swift;

The Massachusetts Association of Health Boards recently reviewed the Barrier Commission Subcommittee on Title 5 draft report and found a number of flaws in this document. Attached to this letter is a response from two of our executive board members.

The shortfall of low income housing is not a result of local health regulations, but a result of decades of poor zoning, increased immigration, and the reliance on a law (Chapter 40B Comprehensive Permits) which pits local government against homebuilders. The present quotas of affordable housing represent an unattainable goal for most communities because the definition does not include older existing private housing stock or mobile home parks, and since low/moderate income units are continually converted to market rate, communities are browbeaten to approve projects which do not provide longterm solutions. Rather than continuing to scapegoat local health officials, we suggest the following more imaginative solutions.

1. Encourage changes in local zoning to allow the redesign of commercial plazas to include second floor apartments. This would reduce traffic, provide a natural linkage between employers and those seeking employment, and would not contribute to sprawl. Cities and small towns flourished under this model until suburban zoning isolated businesses from housing, creating the necessity for car ownership, and spawning our present failed development patterns.

2. Amend Ch. 40B to encourage more non-profit housing partnerships to keep units at low/moderate rates for perpetuity. Many private developers pay off their mortgages early and properties revert to market rate in a matter of years. This is unfair both to the communities and to the consumers of low/moderate income housing.

Although the home building industry would prefer that the state force communities to permit housing developments without regard to public, environmental or planning concerns, these two suggestions would go much farther towards creating a long term solution to the housing problem.

Sincerely,

Marcia Elizabeth Benes
MAHB Executive Director

c.c. Peter Forman, Chief of Staff
Bob Durand, Secretary of Environmental Affairs
Paul Jacobsen, Deputy Commissioner, MDPH
Edward Bertorelli, MAHB Community Liaison

Comments on the Barrier's Commission Subcommittee Title 5 Draft Report June 19, 2001

From: Ravi Nadkarni, P.E., Ph. D. and William R. Domey, P.E., Massachusetts Association of Health Boards (MAHB)

Introduction

The MAHB protests the validity of conclusions of the Barrier's Commission Subcommittee on Title 5 report. First of all, the essence of the report insults the many devoted, voluntary Board of Health members throughout the state. These people are the real experts on septic systems, dealing with them every day, as workers on the "front lines". Such a report should be rejected without meaningful input from local boards of health. Similarly, public health representation is minimized while the representation from developers and builders is maximized. Many of the conclusions and recommendations appear to reflect the same bias represented by the composition of the subcommittee.

Contrary to what is suggested by the report, the vast majority of Board of Health members adopt regulations intended for the protection of the public health, groundwater, and the environment in their communities. They are rarely intended for the purpose of limiting or controlling growth, or to strengthen land use regulations. This is a myth that is perpetuated by homebuilders and realtors in an effort to lower development costs to increase their profits. The cost of housing in any community is a function of what the traffic will bear, and is almost never related to actual builder's costs. An identical house and property for sale in different communities can have a wide range of selling prices.

The report never addresses the actual extent of any problems with so-called problem regulations, but uses a broad brush to intimate that this is a widespread problem throughout the state. There is no information regarding:

1. How many Boards of Health actually have regulations that the committee believes are intended to restrict housing?
2. Who are these Boards of Health?
3. How were these barrier regulations evaluated? Who on the committee had the expertise for the evaluation as to whether or not they had any merit or lacked "science"? Were any of the Boards of Health that adopted these regulations asked for the reasons why they adopted these regulations in the first place? Could it be that many of these regulations actually have merit?
4. In determining "cost" of a regulation, it appears that only the initial construction cost is considered, and not the actual value over a period of many years, which is the only true way of cost comparison. The cost over the lifetime of a septic system is the proper way in evaluate these costs, not just the initial costs which are a concern only to the developer.
5. Is the evidence of widespread abuse by Boards of Health actually based upon real data, or is it merely anecdotal in nature, with no specific basis in fact.
6. Has an analysis been made of the extent to which low cost housing construction

would actually be improved in the Commonwealth if all Board of Health regulations were negated or restricted?

The deficiencies in the draft report are first discussed in general terms below before discussing each recommendation.

- The report tries to emphasize that a regulation has merit only if it is "science-based". In fact, there are many other practical reasons to justify the existence of a regulation. These include corrections of any deficiencies in the original regulation, changes to facilitate administration and so on. For example, for pumped systems, engineering common sense dictates that the pump be on a separate electrical circuit by itself so that other devices don't overload the circuit and that the audible high level alarm be on a circuit separate from that which supplies power to the pump. Title 5 is silent on these issues. A local regulation that requires these changes in not necessarily "science-based" but is compensating for deficiencies in Title 5, and injecting some common sense in the issue to prevent overflows from such a system which would leave a home owner with an overflowing septic tank or pump chamber and cause a public health problem.

- Since the purpose of the report is to deal with barriers to home construction, a proper analysis of such barriers and their effect on home construction should have been a major portion of the report. Instead, we are treated to purely anecdotal information about local regulations that are more stringent than Title 5. Having lived for many years with realtor comments about how "cesspools fail automatically under Title 5" it would have been important for the report to provide specific references to the town or towns that passed these regulations, the exact wording of these regulations and, most important, their specific impact on housing stock. Without the names of the towns, it is impossible for a reader to even verify the claims that these regulations are correctly referenced or that they have indeed affected housing stock.

- The report lists what are called **"Limited-Science Burdensome Regulations"**. It unequivocally suggests that these regulations have no benefit, and only add cost, restrict land and are barriers to housing. Some of these examples merit some discussion.

  - **"Science"** - The report contains contradictions on this issue. For example, in the Introduction, the subcommittee's report states that they decided not to debate science-based regulations regarding setbacks. The same section also admits that more stringent regulations also produce better functioning systems, promote sanitation and protect important ecologic resources. If they admit this is the case, the entire debate about not wanting local regulations more stringent than Title 5 is moot. Further, the Recommendations are largely based on the assumption that Title 5 incorporates the best available science in each and every case and is complete and up-to-date in this respect. Unfortunately this is not the case. Title 5 was based on a combination of science and political compromise. Any claim to the contrary is to forget the process that was employed to develop these regulations. A simple counter example will suffice: The separation to ground water in Title 5 is not adequate to destroy viruses. This was known when Title 5 was written.

$ **Process Limitations** - While Title 5 allows the determination of high groundwater throughout the year, there are situations when it is impossible to make that determination in all cases. For example, it is common in many sandy soils, that the soil morphology does not provide the redoximorphic features for the high groundwater determination, because they are too faint. In other words, the lack of the observed presence of mottles in the test hole does not necessarily mean there is no high groundwater. In these cases, a reliable determination can only be made during the wetter times of the year. Thus the need to restrict the testing period. However, if it were to be restricted only for those who have projects in sandy soil, this would be inequitable. Therefore, it is practical and good sense to keep everyone on a level playing field and restrict all. Generally this should not be applicable to upgrades of failed systems, since it is often necessary to take a calculated risk in the interests of the public health. For new construction, however, the risk of defining an incorrect high groundwater is not acceptable.

As for the stated reasons of limiting testing periods because of "agent-availability", exactly how many communities are documented as having this problem?

$ **Oversizing Requirements** – It is stated that oversizing a system may reduce treatment efficiency. There is no scientific merit or proof for this statement. As to an oversizing of 50%, this is often done by some communities because of the potential of the installation of garbage grinders for systems that are not sized to accommodate them. It is common knowledge, that most new houses today have are equipped with garbage grinders, very often after the Board of Health has issued a Certificate of Compliance. Some builders even brag about this "off-the record". Some towns have this problem. Some do not. Isn't the local Board of Health the best authority to make that judgement for their own community?

As for excessive bedroom counting, exactly how many communities pose this problem?

$ **Overbuilding requirements** – If one looks at the long term, not just the initial cost, expanding the spacing between trenches for the future placement of the reserve area makes good sense for more than one reason. Sadly, the committee report incorrectly infers that the reserve area may never be needed. This is the kind of thinking that has led us to the present situation of having to install upgrade for failed systems in inopportune and expensive locations. First of all, it guarantees that the reserve area will be dedicated and protected for that purpose for a long time in the future. The reserve area will not be the site of the swimming pool, the tennis court, the garage, large trees, etc. Further, a reserve area that is between existing trenches will ensure that if a future upgrade is necessary, it can be implemented at minimum cost.

$ **Percolation Rate Limits –** The report states that "many" communities limit maximum percolation rates at 20 minutes per inch. How many communities? How much land area is actually affected? How much of an increase in affordable housing will be achieved by changing this. Actually, it can be agreed that there is probably no real merit in restricting the percolation rate to 20 minutes per inch. Further, there is evidence that it could be increased to 60 minutes per inch. However, although it was agreed between the Mass DEP and the Title 5 advisory committee in 1995 that this would occur in 3 years, it is the DEP that has dragged its feet on this issue. The so-called problems of constructing a system in such soils are vastly exaggerated. The fact that one community in the whole state does not allow a system where the percolation rate is less than 2 minutes per inch is hardly an argument for claiming widespread abuse by Boards of Health. That position does, in fact, have some technical merit. Actually, the Title 5 measures have less merit.

$ **Limiting or Prohibiting Mounded Systems** – The committee should indicate how many communities actually do his. All over the state we hear complaints of mounded systems being built. In reality, this is probably not an issue in most communities.

$ **Limiting Innovative or Alternative Technologies for New Systems –** This argument in the report contradicts itself. The headline is "new" systems, but the discussion focuses on remedial systems. Again, how many Boards of Health actually will not allow I/A systems for upgrades of failed systems when applicable? The real reason that they are not used more is because they are often more expensive compared to conventional systems.

$ **Prohibiting Shared or Community Systems –** Although it has been 6 years since shared systems have been authorized by Title 5, the Massachusetts legislature has done nothing to provide legislation equivalent to that in effect about condominiums to assure that such systems will be operated and maintained properly, with proper financial safeguards in place. While there is no scientific or engineering reason that they won't function, there remains a real problem of real financial responsibility for operation and maintenance and replacement.

The report's 14 recommendations are not numbered but are grouped under several headings. Therefore, in these comments, they are numbered and repeated prior to discussion:

1. **Limited Science - Burdensome Regulations - Recommendation**

a. **OPTION 1: Regulations that are more stringent than Title 5 must state the public health threat and state the science to demonstrate that the regulatory**

change will protect public health. In addition to filing the regulations with DEP, the regulations must be approved in writing by DEP in order to become valid. This is akin to the Attorney General's approval of zoning bylaws and will be addressed in another paper. There should be no constructive approval for the DEP's failure to act upon a request to approve a regulation.

b. **OPTION 2: DEP should issue guidance to boards of health indicating that in its opinion the above types of regulations do not, on their face, appear to be based in science and are subject to legal challenges pursuant to M.G.L. 111 by aggrieved parties. Boards would be advised to exam their regulations and if they contain these types of condition they should obtain the necessary scientific documentation, if they haven't already done so, or eliminate them. Under this option, there is no required statutory change and DEP remains a mandatory depository for the regulations in order to be adopted but it does not have the authority to approve regulations. Regulations proposed at the local level must state the public health problem and how the science and literature supports the regulations that are more stringent than Title 5 to protect public health.**

c. **OPTION 3: The third option is intended to address legal, technical, political and resource questions. Under this option, the statute would not grant DEP absolute authority over the approval of a regulation but would set a two prong test. First, the local board of health would be required to identify the threat to public health posed by adherence to the Title 5 code and must specify the science to support the change in the regulations. Second, the board of health would have to file the regulation with the DEP within thirty (30) days in order for the regulation to become effective.**

All of these options involve the DEP usurping the authority of local Boards of Health in some fashion. Again, the operating assumption is that Title 5 is based on the best available science when it is not. Each option also ignores court rulings which have consistently supported the authority of local Boards of Health in these matters. Specifically the options ignore Arthur D. Little Inc. v. Commissioner of Health, 395 Mass. 535 (1985), which ruled that the Board could act against potential threats to public health and the Boards of Health are not subject to the state administrative procedure act. The courts will only strike a Board of Health regulation when the challenger proves, on the record, "the absence of any conceivable ground upon which [the rule] may be upheld." All three options here contradict these court rulings.

2. **Limited Science - Burdensome Regulations - Recommendation**

DEP and DCHD should build on past collaborative efforts to identify other ways in which

the two agencies can collaborate on the implementation of Title 5 regulations.

The consequences of this recommendation are not clear.

3. **Improved Science and Education - Recommendation**

The Commission should consider funding an update to the DeFeo-Waitt Report and collection of literature from the other states and relevant sources. An advisory group should be created by DEP to assist in compiling existing science and as a forum for technical discussions on updated scientific discussions.

A good idea.

4. **Improved Science and Education - Recommendation**

A guidance document similar to the DEP Stormwater Guidance document should be published that addresses the technical questions associated with Title 5 and provides the science and literature that address these issues. The Advisory Committee would oversee the update and assist in the presentation of the science and literature.

Combine this recommendation with item 3. The plan should be to issue periodic updates, perhaps every 5 to 7 years.

5. **Improved Science and Education - Recommendation**

Publication of a guidance document, as well as any amendment to the Board of Health enabling statute, must also be accompanied by a process for the education of local boards of health.

MAHB is successfully training and educating Boards of Health in many areas, as are other organizations. DEP and other state agencies are involved in conducting specific sessions in the areas of their expertise.

6. **Improved Science and Education -Recommendation**

The Commission should consider the use of circuit riders for assisting local boards of health and their agents in implementing Title 5.

Circuit riders can become a crutch. Furthermore, we have a concern that many people available for such jobs are young and without experience on the broad spectrum of local issues. Our preference is for training and education of the Boards of Health and their professional staff. Also, given the contradictory advice we often receive from regional DEP offices versus the advice

from DEP Headquarters, the use of circuit riders could increase the inconsistencies.

7. **Improved Science and Education - Recommendation**

In addition to technical education for boards of health, programs should be developed for cross-board training on general Title 5 for boards of health, planning and zoning boards, and boards of selectmen. This should include cross-board training for all boards on growth management, including the role of Title 5 in siting and designing development.

This is a good idea. However, all such boards in rural areas where on-site disposal is the only option are volunteer boards and time availability is an issue.

8. **Improved Science and Education - Recommendation**

The Comprehensive Water Resources Management Guidance currently being developed by DEP for use by communities should include guidance on the role of typical on-site systems, shared and alternative systems and septage management districts as part of integrated solutions to wastewater management. The guidance should include examples of successes that have occurred and samples of acceptable legal instruments that are often required.

No comment.

9. **Title 5 Regulations and Policies - Recommendation**

DEP should develop a policy to allow for the use of B horizons, that are sufficiently permeable, in new soil absorption systems.

DEP has already done this for system upgrades.

10. **Title 5 Regulations and Policies - Recommendation**

DEP should develop a guidance document on the nature and extent of the scientific evaluations necessary to designate an area to be nitrogen sensitive as well as the procedures necessary to adopt such a designation.

Good idea. This guidance is probably already available on the techniques to use to designate Zone II for any municipal drinking water supplies.

11. **Title 5 Regulations and Policies - Recommendation**

DEP should alter the application procedure for applicants wishing construct septic systems

Comments on the Barrier's Commission Subcommittee Title 5 Draft Report of September 20, 2001

From: Ravi Nadkarni, P.E., Ph. D. and Marcia Benes, Massachusetts Association of Health Boards

The comments below are supplemental to the comments on the Draft of June 19, 2001. We understand that both sets of comments will be published with the report as a Minority Report from the MAHB. Given the seriously flawed nature of the revised document, we can not provide cosmetic word changes to render the document acceptable.

Summary: The report states in the first paragraph, "In summary, one could say all of these regulations in some way restrict land from being used for housing or, at least, add some cost to housing." This is an interesting statement since it is true of many laws and regulations passed since Massachusetts was part of the Bay Colony. Are the authors advocating repeal of all such laws protecting public health and the environment?

Report Methodology: The revisions to the June 19 Draft do not address the issues raised in our previous comments but, at best, pay lip service to those comments. Our previous comment on the methodology was that "we are treated to purely anecdotal information about local regulations that are more stringent than Title 5.....it would have been important for the report to provide specific references to the town or towns that passed these regulations, the exact wording of these regulations and, most important, their specific impact on housing stock. Without the names of the towns, it is impossible for a reader to even verify the claims that these regulations are correctly referenced or that they have indeed affected housing stock." These comments still stand. On page 2, the report states that the subcommittee, relied extensively on their collective experiences, in order to come up with categories of conditions that create barriers without a readily apparent public health or environmental benefit. In other words, the lop-sided views are a result of the lop-sided composition of the subcommittee. We are now told that out of 351 municipalities in the Commonwealth, the regulations from 12 Boards of Health were randomly selected for review. This is a 3% sample. The text also refers to an attached Table 1, which contains check marks against various categories such as process limits, oversizing regs, overbuilding regs, perc rate limits, prohibit mounded systems, limit I/A technology and prohibit shared systems. Another problem with the table is that many process or other limitations have strong scientific basis; e.g. a Town may restrict perc tests to months with high groundwater because soil conditions do not reveal mottles. It is irrational to condemn local regulations which might scientifically accommodate local conditions purely because they go beyond Title 5.

How were the 12 towns "randomly"selected? Was it truly a random selection or was it designed to support conclusions already reached? Is a 3% sample statistically sound to support the conclusions previously derived purely from anecdotal information? Finally, the effect of these "more stringent" regulations on housing stock creation, or more specifically, the creation of low cost housing is not analyzed. The presumption is that any deviation from Title 5 is automatically a constraint.

What is science-based and what is not?:
The revised report continues to debate this issue incorrectly. Available data on many issues is scientifically inconclusive or selected data can support either side of an argument; regulations can incorporate factors of safety for protection, regulations can consider ease of enforceability and so on. Therefore, to insist that regulations be purely driven by science is not consistent with the way Title 5 was developed.

MAHB role misrepresented: the report states, "Both associations (MAHB and MHOA) have since been contacted, provided an opportunity to comment and participate in future meetings. MAHB sent a representative to the subcommittee's last meeting where minority reports were discussed." This statement does not properly represent the dynamics of what happened. MAHB commented on the June 19 draft and sent these comments in several directions, including to Gov. Swift's office. Our invitation to participate came only after that. While we did send a representative to the subcommittee's last meeting, the report was, by then, cast in concrete. We did not participate meaningfully in deriving any of the conclusions in the report and the report still does not address the questions we raised in our initial comments.

Who actually wrote the report? The report is a MSWord document. It reveals that the author of the report is Robert F. Daylor. He is the author of the June 19, August 20, and the September 17 versions. The September 20 version, on which we are supposed to comment by September 24, has editorial changes (redline and strikeouts) by Glenn Haas of the DEP. Why is Mr. Daylor authoring a report for the DEP Commissioner's signature? Is Mr. Daylor a DEP subcontractor? If MAHB was a member of the Subcommittee, we would doubtless know the answer to this last question, but our confusion underscores some of the problems with this entire process.

Comments on specific recommendations:

Our previous comments on the various recommendations still stand.

a) Amending M.G.L. c.111 section 31: The first recommendation in the report is that a Board of Health "be required to identify the threat to public health posed by adherence to the Title 5 code and must specify the science, technology or administrative need to support the change in the regulations". Obviously, this recommendation is not followed by the authors of this report since they have not provided any real data to support this drastic preemption of BOH authority.

b) MAHB involvement: The recommendation involving MAHB in some of the associated training and data-gathering efforts as a subcontractor sounds disingenuous in the context of this report.

September 24, 2001

To: Glenn Haas
From: William R. Domey, P.E.
Member of MAHB Executive Board
RE: Barrier's Commission Subcommittee on Title 5.

Dear Glenn:

Thank you for the opportunity to "sit in" last Wednesday with your committee regarding the finalizing of the T5 subcommittee report and the minority reports. I appreciate that you have emailed the latest redraft to me and I am presuming that there will be future communication with me regarding meetings and reports.

I was especially glad to see that there has now been some recognition that septic system regulations as adopted by Boards of Health can have different basis than only the "science" criteria. As we agreed, Title 5 itself is in fact **not** based solely on science, but also on other factors, including political agendas. This welcome change is reflected in the recommendation on page 4 that M.G.L. c.111, section 31 be amended to require the local board of health to specify the **science, technology, or administrative** (should be scientific, technological, or administrative) need to support the change in regulations.

However, I can only consider this a very small beginning of any change in attitude. You are also recommending that the local board of health be required to identify the threat posed by adherence to Title 5 code. This is a ridiculous requirement. How can a local board of health do that? Certainly there is little in Title 5 that threatens the public health or the environment. The main problem with Title 5 is that in certain areas it is incomplete, ambiguous, or silent. Therefore, local regulations are required, not to conflict with Title 5, but to complement it and to provide additional guidance. I will take this opportunity to advise you that by 8-page letter to Marsha Sherman of DEP, dated May 12, 1999, I described many of these issues.

Although the recommendation on page 4 opens the door for other regulation reasons, this is not reflected otherwise throughout the report. Only "science" is mentioned in critical paragraphs on pages 1 and 2. This situation should be remedied in the report.

On another issue, I am very disappointed that the strong paragraph on page 3 regarding "Reserve Area Requirements". I believe that I have pointed out to the committee that there are significant reasons where expanding spacing for trenches for reserve areas serves the public health and is actually more cost effective when one considers the long term costs of subsurface disposal.

As to Section 4, Minority Reports, as I stated at the meeting, I do not agree that all of your responses are adequate.

4.1 I am happy to see that you have concluded that most Boards of Health do not use intentionally use septic regulations for land control.

4.2 I can not agree that my attendance for 1-½ hours at the last meeting you have had before preparing this version of your report has provided any really meaningful participation in the findings of your committee. MAHB represents many boards of health, which lost their voice in this process. I still believe that the MAHB and the many boards of Health that it represents deserve more input to the report. The representatives of health boards and health agents that you cite do not provide the same broad perspective that MAHB can contribute.

4.3 I can not agree that you have proved your point that unreasonable or superfluous local limitations are more than isolated instances. The table of regulations from 12 towns that DEP has prepared is not statistically significant for evaluation of 351 cities and towns. Also, the table gives no information as to the extent of the effect of the unreasonable local regulations on barriers to housing.

In summary, I must still object to many of the statements in the report as cited in the MAHB comment letter of June 19, 2001.

I hope that you will seriously consider these comments before finalizing the report. Please share this comment letter with all of the members of your committee. I would appreciate it if you would forward to me all of the comments of others regarding this latest redraft of the committee report.

COMMENTS OF THE MASSACHUSETTS ASSOCIATION OF REALTORS ON TITLE 5 SUBCOMMITTEE REPORT

The Massachusetts Association of REALTORS(MAR) genuinely appreciates the opportunity afforded to us by the Swift Administration to participate in the Barriers to Housing Commission. MAR, NAIOP, the Greater Boston Real Estate Board and the Mass Association of Home Builders have long believed that a thoughtful examination of the issues regarding the shortage of housing and the impact that local septic regulations and their enforcement play in that shortage is essential to effectively addressing this problem.

The findings in paragraphs a-g of the "Local Limitations" portion of our subcommittee's report are, in MAR's opinion, an important collective acknowledgement of the problems facing home owners and property developers under our current two-tiered Title 5 system of state and local regulation. There is a clear belief amongst subcommittee members representing property owners and builders that many local communities are, in fact, attempting to use Title 5 and local septic ordinances as de facto zoning and growth management tools. This usage is not only unfair to property owners, it is inconsistent with both the letter and spirit of the sanitary code and the authority vested in these local health officials.

It is with this understanding of the current situation in mind that MAR respectfully suggests that the proposed recommendation of the subcommittee to deal with this problem falls short of what many in the real estate community believe to be substantive changes to this problem.

MAR has consistently supported a uniform code for Title 5. While recognizing the attendant need for additional funding for DEP and the political difficulties that may be encountered in any perceived encroachment on the concept of "home rule" as it relates to septic systems, we remain convinced that the best way to create a level playing field for homeowners and builders throughout the Commonwealth is to establish a uniform code for septic systems. While we acknowledge that the recommendation in the subcommittee's report to amend M.G.L. c. 111, section 31 as not being inconsistent with that goal and a clear improvement of the current situation, we do not believe it will solve all of the problems related to this issue at the local level. In short, though we would view this recommendation as a potential step in the right direction, we would still suggest that a framework under which stricter local septic controls must be reviewed and approved by the Commonwealth is the most effective solution to this problem.

There is currently no mechanism by which DEP may effectively address the misuse of Title 5 by communities seeking to stop housing production or improvement. As a result, we believe many property owners spend millions of dollars every year complying with local septic ordinances that may have no sound basis in science or foundation in environmental protection and that many units of much-needed new housing go unbuilt. This situation must change. Should the full committee accept the subcommittee's recommendation on this matter, we would hope for a commitment by DEP that they would be ready to revisit, and support, our position on a uniform code should the subcommittee's recommendation fail to produce a substantive improvement in this situation.

Thank you again for the opportunity to participate in this important project.

Sincerely,

Stephen J. Ryan
MAR General Counsel

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CC: Commissioner

Massachusetts Audubon Society
208 South Great Road
Lincoln, Massachusetts 01773
(781) 259-9500

July 16, 2001

Mr. Glenn Haas
Acting Assistant Commissioner
Department of Environmental Protection
One Winter Street
Boston, MA 02108

RE: Draft Report of Title 5 Subcommittee to Barriers to Housing Commission

Dear Mr. Haas,

I am writing to comment on the Barriers to Housing Commission Title 5 Subcommittee draft report. The Massachusetts Audubon Society appreciates the opportunity to participate on the subcommittee.

In general, we believe that the draft report accurately captures the suggestions made by members of the Title 5 Subcommittee. We do not, however, agree with a number of the conclusions and statements included in the draft report.

While we do agree that a number of communities have enacted local regulations governing the use of septic systems that are more stringent than Title 5, we do not agree with the assumption that this has typically been done to restrict growth and development. In general, the subcommittee, which placed great emphasis on the need for science as the basis for septic system regulation, took a very unscientific approach in casually accepting the assumption that growth control is the basis for many local regulations. That hypothesis remains untested and unproved. Clearly, some local onsite sewage disposal regulations may have the effect of increasing the cost of construction and limiting where septic systems can be used. Further, some local regulations may not substantially enhance the protection of public health and the environment. However, we believe that most local health boards have enacted local regulations in response to local conditions and with the intent of better protecting the health and welfare of the residents of their community.

We believe that most communities are attempting to do their best to implement Title 5 to protect public health and the environment and that most local septic system regulations are developed and adopted to further this end. A detailed review of the literature on septic system performance, including the literature reviewed for the preparation of the 1991 DeFeo Wait Report, demonstrates that precise information on septic system performance and design requirements is

hard to find, and that Title 5 requirements may, in some cases, be insufficient. It is clear that septic system performance varies with site conditions and use and that a one size fits all approach, such as a uniform code, is not a realistic solution. In order for a uniform code to provide adequate public health and environmental protection in all of the varied conditions and uses encountered across the commonwealth it would have to be more stringent than the current regulations.

While developing precise information on design requirements for septic systems is difficult, the commonwealth could greatly assist communities in enacting sound local regulations that respond to real local needs by providing increased education and technical support. The ability of communities to protect local resources and public health could be greatly enhanced by guidance from the state on the types of measures that are likely to be effective to achieve specific goals. For example, if communities are concerned about nitrogen discharges, the use of alternative technologies with nitrogen removal capabilities could be encouraged whereas increasing separation to groundwater could be identified as a measure that would generally not be effective. Specific guidance regarding the types of requirements that are appropriate to achieve local goals would help to avoid the problem of local regulations that make new housing more expensive without actually enhancing public health and environmental protection.

The subcommittee focused on issues relating to onsite sewage disposal and new construction. If the goal is to improve the affordability of housing, the state should consider providing increased education and outreach to local health boards regarding the inspection and upgrading of existing onsite sewage disposal systems. Since existing housing stock is typically the least expensive and the most readily affordable by those with low and moderate incomes, affordability of housing could be improved by ensuring that inspection and repair requirements do not exceed Title 5 standards, except where necessary to address genuine public health and environmental quality threats. Increased efforts by the state to educate local boards on appropriate inspection and repair measures would enhance the affordability of housing.

We heartily endorse the recommendations of the subcommittee regarding increased education for local health boards. We also endorse the recommendation that the state fund an update of the DeFeo Wait report. Before such an update is undertaken, however, it will be important to thoughtfully consider and identify the key issues and questions that such a report should address.

The Massachusetts Audubon Society opposes proposals to limit the home rule authority of the commonwealth's cities and towns on public health issues. We believe that in general, local health boards have acted in response to local concerns and conditions to protect public health and the environment. Lack of sufficient funding and technical expertise may sometimes have resulted in counterproductive local regulations, but this does not justify limiting local powers. Instead, the state should focus its efforts on providing increased education and technical assistance to local health boards.

Sincerely,

Lou Wagner
Regional Conservation Scientist